

Abstract

Systems and methods are provided for modifying firmware in a disk drive without risk of data loss in a RAID storage system by substantially preventing the RAID storage system from entering into a degraded mode during the firmware modification. In one embodiment, the RAID storage system includes a system disk drive designated for firmware modification and includes a second or proxy disk drive. A storage controller coupled to both drives may copy data from the system disk drive to the proxy disk drive. The controller may then disable the system disk drive and direct requests to the proxy disk drive. Once the system disk drive is disabled and its data copied, the storage controller may change firmware of the system disk drive. Following firmware modification, the controller may update data as needed on the system disk drive and may then enable the system disk drive to again process the requests.